

Astrobiologist Example

Performance Assessment Development Tool

I wanted to find an engaging way for students to apply what they have learned so far in our science unit about organisms. This activity allows students to be creative and to make choices. It is expandable so that students at all levels will be able to complete it, with varying levels of detail and complexity.

ASSESSMENT PROFILE

Name of assessment	Astrobiologist
Content area(s) of assessment	Organism classifications and adaptations
Short description of assessment	Invent a new life form from outer space and describe its adapted characteristics, life cycle, environmental conditions and classification.

Section 1: Assessment Population and Purpose

ASSESSMENT POPULATION

Please select the appropriate **grade level(s)** for this assessment.

- Pre-K K 1 2 3 4 5
 6 7 8 9 10 11 12
 Other _____

Does the assessment apply to specific **groups**, such as advanced automotive course, or AP calculus? If so, please specify.

Whole class of Grade 4 students

ASSESSMENT PURPOSE

What is the intended **purpose** of the assessment? Check all that apply.

To inform instruction (formative)

To measure outcomes (summative)

To provide feedback to students (interim)

PURPOSE STATEMENT

This task is a/an interim assessment of learning that will offer an opportunity to gauge Grade 4 students' knowledge/skills of biological classification and adaptations and will measure learning covered over first part of the unit on organisms.

Section 2: Standards and Performance Outcomes

Use the table below to indicate the specific **content standards**, related **performance outcomes**,¹ and **indicators**² that the assessment is designed to measure. Then list the accompanying, aligned task for each standard and performance outcome. Note that tasks may appear more than once if they are related to more than one content standard and performance outcome.

When creating the task(s) consider the complexity of the standards and whether the task requires the student to apply the skills and knowledge they have mastered. Indicate the **level of complexity** for each task using a taxonomy such as Bloom's Taxonomy of Learning. Indicate the **weight**³ associated with each performance outcome, not necessarily with each task. This will be used on the rubric and to generate the final score or rating for the assessment.

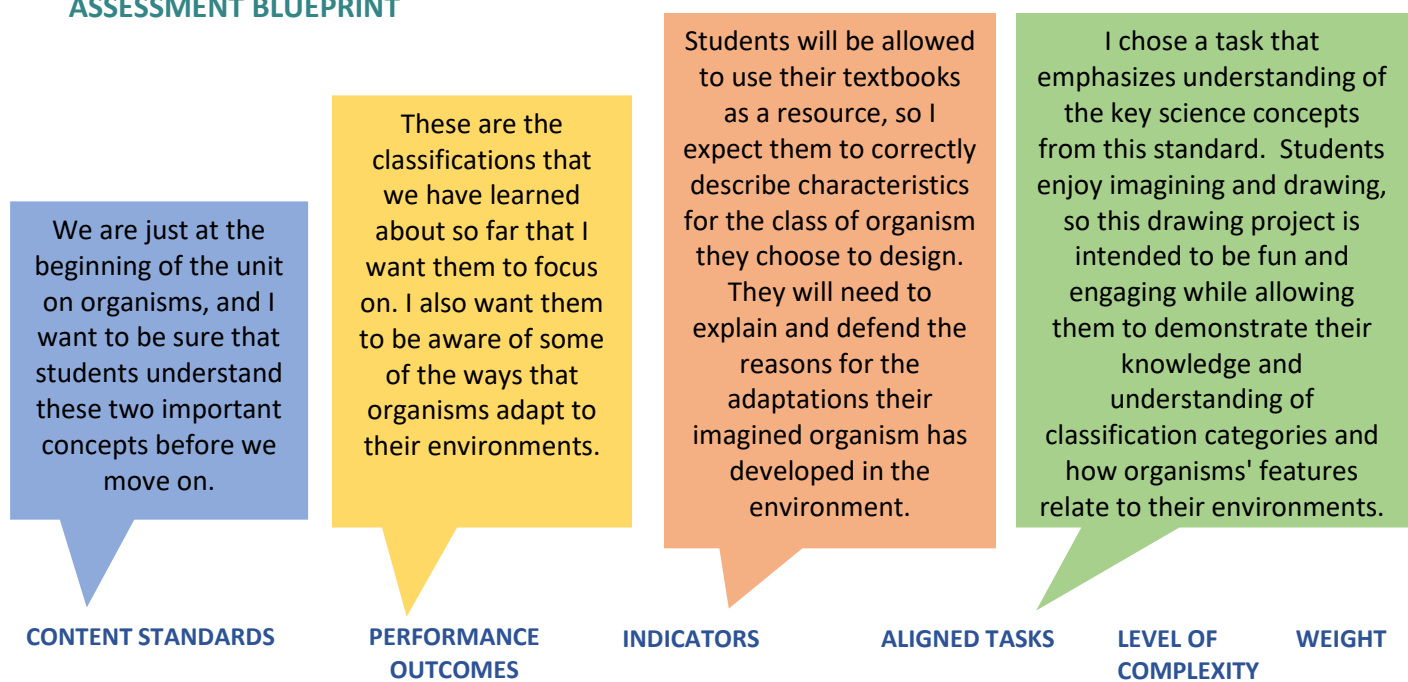
This table is referred to as an Assessment Blueprint, because it serves as a guide for developing the performance assessment.

¹ Performance outcomes refer to the academic knowledge, behaviors, and skills that students are expected to demonstrate in a performance task.

² Indicators refer to the observable or measurable characteristics of the knowledge, behaviors, and skills that students are expected to demonstrate in a performance task. The indicators break down the PO into concepts students need to know, understand, and demonstrate.

³ Weight refers to the percentage of total points that will be allocated to each performance outcome. Performance outcomes of equal importance and complexity may be weighted equally, while those of lesser importance and complexity are weighted less.

ASSESSMENT BLUEPRINT



CONTENT STANDARDS	PERFORMANCE OUTCOMES	INDICATORS	ALIGNED TASKS	LEVEL OF COMPLEXITY	WEIGHT
Organisms and environments. The student knows all organisms are classified into groups that share similar characteristics that allow them to interact with the living and non-living parts of their ecosystem. Students recognize the broad classification categories of common animals.	Students correctly classify common organisms as mammal, bird, fish, reptile or amphibian.	Students are able to identify the characteristics that differentiate an organism into one of the classifications.	Draw and label an imaginary creature from outer space and describe what it looks like and which features, including life cycle, it has that relegate it to one of the classifications.	Application	50%
Organisms and environments. The student knows that different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.	Students describe and evaluate the relationship between environment and adaptive features.	Students are able to imagine a reasonable adaptation that an organism would make to an invented environment.	Draw and label important environmental features (available liquids, gases, temperature, etc.) and how their invented organism has adapted to thrive in that environment.	Analysis	50%

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